

## Unit 3.3 Practice Solving systems using substitution

Period \_\_\_\_\_

**Solve each system by substitution.**

1)  $y = 2x - 5$   
 $y = -2x + 11$

 $(4, 3)$ 

2)  $y = 7x + 4$   
 $y = -6x + 4$

 $(0, 4)$ 

3)  $y = -8x - 12$   
 $y = x + 6$

 $(-2, 4)$ 

4)  $y = 8x + 5$   
 $y = 4x + 1$

 $(-1, -3)$ 

5)  $8x - 6y = -18$   
 $y = 6x - 11$

 $(3, 7)$ 

6)  $3x - y = 13$   
 $y = 3x - 13$

Infinite number of solutions

7)  $y = 3x - 12$   
 $2x + 3y = 19$

 $(5, 3)$ 

8)  $-8x - 8y = 24$   
 $y = 5x + 9$

 $(-2, -1)$

$$\begin{aligned} 9) \quad & -8x + y = -15 \\ & -6x - 6y = -18 \\ & (2, 1) \end{aligned}$$

$$\begin{aligned} 10) \quad & x + 2y = 4 \\ & -2x - 4y = 3 \\ & \text{No solution} \end{aligned}$$

$$\begin{aligned} 11) \quad & x - 3y = 5 \\ & -x + 3y = 7 \\ & \text{No solution} \end{aligned}$$

$$\begin{aligned} 12) \quad & 3x + y = -4 \\ & 3x - 6y = -18 \\ & (-2, 2) \end{aligned}$$

$$\begin{aligned} 13) \quad & 3x - 3y = 9 \\ & -x - 6y = -17 \\ & (5, 2) \end{aligned}$$

$$\begin{aligned} 14) \quad & 5x - 2y = 3 \\ & 7x + 6y = 13 \\ & (1, 1) \end{aligned}$$

$$\begin{aligned} 15) \quad & -3x + 6y = 9 \\ & y = 3 \\ & (3, 3) \end{aligned}$$

$$\begin{aligned} 16) \quad & 6x + 3y = 0 \\ & -4x - 6y = -16 \\ & (-2, 4) \end{aligned}$$